

OEO Developer Meeting #23

Pads:

- Pad to this meeting: <https://etherpad.wikimedia.org/p/oeo-dev-23>
- Pad for next meeting: <https://etherpad.wikimedia.org/p/oeo-dev-24>
- Notes from last meeting: <https://etherpad.wikimedia.org/p/oeo-dev-22>

Date: 26.08.2021, 10:00 -- 12:00

Participants: Hannah, Christian, Lukas, Vera, Martin, Simon, Kai, Adel

- moderator: HF + CH
- protocol: Vera schreibt, Christian lädt hoch
- next meeting organiser: Kai

Preparation:

- Read last protocol: <https://github.com/OpenEnergyPlatform/ontology/wiki/OEO-developer-meetings>
- Check issues for next release: <https://github.com/OpenEnergyPlatform/ontology/milestones>
- Load software (GitHub, git, Protégé, DFN)

Agenda

• Protocol from oeo-dev 22 was not yet archived!
OEO-"viewer" on OEP (input AP, joint discussion)

- an OEO-viewer is in the works: <https://github.com/OpenEnergyPlatform/oeplatform/issues/763>
 - Adel works on this, will be implemented in the OEP
 - 2 options of views:
 - text base view: classes, super classes and sub classes are shown
 - graphic view: shows a hierarchy as a tree diagramm (shows only subclasses) and as list
 - search function
 - button for "annotate my data" (API for that doesn't exist yet)
 - a metadata file from the OEP database can be mapped to the ontology terms
 - a json file is created in the background (the user doesn't see it)
- Discuss what elements should be shown.
 - "description" maybe renamed as "definition"
 - eludiation annotation from bfo classes might be a source for something like definitions
 - start with the basic elements of the OEO
 - graph view: just shows the taxonomy thus far, should it also display the other relations? showing the relations is very complicated, there is no good solution yet

- textual representation of other roles might be an option
- how to show inferred roles?
 - one (bad) way is to have reasoning on query time. (might be slow)
 - materialization is taking a reasoner who creates a materialized ontology with all inferences so they would be there during runtime
 - only works if we don't include any dynamic data
 - if the ontology stays static the reasoning is not problematic
 - static view is sufficient for now
- annotation would use relations quite often, e.g. wind turbine is in germany
 - given database table column corresponds to certain relation
 - fields of entries in column are instantiations of class or several classes.
 - be able to link to graph view of specific class
- ontology content negotiation
 - means showing different things depending on whether you come from browser or terminal
 - question came from Johannes, but he is not present
 - are links (URL) for classes of the ontology possible? could be a new feature for the graph view
- graph view
 - Example for an existing graph view with relations: https://www.ebi.ac.uk/ols/ontologies/chebi/terms/graph?iri=http://purl.obolibrary.org/obo/CHEBI_67079
 - do we still need the old viewer?
 - new viewer should be default
 - having too much information is overwhelming, so we should have fold out menus to let user access extra information
- implement editing functionality?
 - editing the OEO?
 - nope.
 - editing should be in line with the github workflow
 - changing the ontology is not a good idea, but maybe changing the metadata?
 - if a concept is not available in the OEO the superclass should be used for annotating the data if time is too little to add the concept with the github workflow
- use cases:
 - look for definitions
 - for energy system modeller newcomers to inform about the concepts
 - data annotation:
 - Upon upload: Some guidance on which classes/properties may be appropriate
 - link to a tutorial

data annotation

- for future users and for existing databases
- should be possible while uploading, maybe when filling out the metadata
- colour annotation with free text fields --> search results from the OEO concepts could pop up --> the user could read the definition, maybe see example usages --> user could choose the concept which fits best
- alternative terms are important, maybe we need more of them
- could be a nice student topic @Martin takes note and will try to find a thesis/research topic.

OEO on OEP

<https://github.com/OpenEnergyPlatform/oeplatform/issues/774>

<https://github.com/OpenEnergyPlatform/oeplatform/issues/750>

Adel worked on updating the information on the OEO on the OEP homepage (is nearly done)

Follow up on Special Meetings from oeo-dev 22:

- Tackle these open issues from oeo-model jointly:
 - <https://github.com/OpenEnergyPlatform/ontology/issues/183> (handles_uncertainty) --> is already closed
 - Simon closed the issue, because everything was already implemented
 - <https://github.com/OpenEnergyPlatform/ontology/issues/179> (crawling from EnArgus/DBpedia)
 - Till is assigned, not much happened yet. Planned as a thesis topic for a student. Existing concepts should be used from the EnArgus ontology soon.
 - a thesis would need to happen within one semester
 - Till will be back next week and @Martin will get in touch with him
- Organise meeting on relations
 - Some relations miss ranges and domains
 - some definitions imply relations but we didn't use them
 - <https://github.com/OpenEnergyPlatform/ontology/issues/850>
 - follow up meeting with a smaller group or in the next OEO meeting? Probably ontology-experts are needed for this meeting.

Potential new Special Meetings:

- Missing terms for economic agent-based modelling <https://github.com/OpenEnergyPlatform/ontology/issues/839>
 - Ulrich + Hannah and energy experts?

- too much terms for one meeting - cluster them and do separate meetings? --> Ulrich should
- Collection of new OEO terms originating from LOD-GEOSS
 - <https://github.com/OpenEnergyPlatform/ontology/issues/593> (540 concepts)
 - IAMC template (Michaja brought that up)
 - the list contains several concepts, firstly the concepts which repeat should be condensed e.g. final energy,...
 - then we can see which concepts already exist in the OEO and add the missing ones, a structure is needed
 - <https://github.com/OpenEnergyPlatform/ontology/issues/822> (21 concepts)
 - discussion can continue in the issue or in a special meeting

Update of renewable origin (Input Simon)

- <https://github.com/OpenEnergyPlatform/ontology/issues/741>
- summary of the discussion: <https://github.com/OpenEnergyPlatform/ontology/issues/741#issue-872122638>,
- presentation: https://1drv.ms/p/s!Akw9xEzuoECPifl2SaBU3b0xkWdL_A?e=eMn5SC
- open problems:
 - how to deal with only sometimes renewable classes (e.g. pumped water)
 - Should we / how can we relate energy to origin?
 - why did we not decide on a process for origin? reasoning:
 - the energy ending up in an energy carrier or being available is the output of a process
 - Renewable: the process needs to be repeatable and does only require renewable inputs (!circular logic!) / and is fed with energy from a replenishable (on a human timescale) source (stealing from the current definition)
 - none of the above is good - discuss again
 - LE, MS or HF can prepare (participants of issue)